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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,712	11/28/2001	Yoshio Ishii	003510-112	7908
7590		07/28/2004	EXAMINER	
Young & Thompson		DUDDING, ALFRED E		
Suite 200		ART UNIT		
745 South 23rd Street		2853		
Arlington, VA 22202		PAPER NUMBER		

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/994,712

Applicant(s)

ISHII ET AL.

Examiner

Alfred E. Dudding

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 8-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 8 and 12-20 is/are allowed.
- 6) ☒ Claim(s) 9-11, 21, 22, 25-29, 31 and 33 is/are rejected.
- 7) ☒ Claim(s) 23, 24, 30 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 9, 21, 22, 25 - 29, 31, and 33 are rejected under 35 U.S.C. 102(a) as being anticipated by Suzuki et al. (U.S. 6,547,361 B1).

Suzuki et al disclose an image recording apparatus comprising a recording section for recording, on the basis of input image information, an output image on a recording medium by ejecting recording droplets from an ejection opening of a recording head and adhering the droplets onto the recording medium, Column 28, lines 4 - 16; a monitoring section for monitoring and determining whether a phenomenon which may hinder image recording has occurred, Figure 30, element 661; a reading section for photoelectrically reading the output image, Column 28, lines 16 – 21, Figure 28, element 633 (light source), element 635 (CCD); and an adopting section for carrying out a process to overcome the phenomenon, when it is determined that said phenomenon has occurred, wherein the monitoring section monitors whether said phenomenon has occurred by comparing the results the reading performed by the reading section corresponding to said output image, Column 28, lines 26 – 35. Suzuki et al. discloses a storage section for storing the image information, Figure 30, element 661. Suzuki et al. teach an apparatus wherein when it determined that a phenomenon for inducing a decrease quality of an output image has occurred, in order to eliminate a decrease in the image quality

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which hinders image recording, the adopting section adjusts, on the basis of results of the reading performed by the reading section, an ejection amount of recording droplets, such that a decrease in the image quality of the output image is corrected, Column 28, lines 30 – 35. Suzuki et al. discloses a cleaning section for cleaning around an ejection opening of the recording head, Figure 27, element 623, Column 21, line 40 – 44. Suzuki et al. teach that when it is determined that said failure has occurred, said adopting section operates an alarm to call an operator, Figure 32, step S178. Suzuki et al. teach that the adopting section operates the cleaning section when it is determined that an ejection opening of the recording head is clogged, Figure 32, steps S172, S176, S177, and S1734. Suzuki et al. disclose a main tank which is provided in the recording head, Figure 29, element 611c, a supply mechanism for supplying the recording solution to the main tank, Figure 29, element 651c (pump), and a subtank, Figure 29, element 650c, connected to the main tank via the supply mechanism.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. in view of Itoyama et al. (U.S. 6,488,353 B1).

Miura et al. teach all of the limitations of the claimed invention except for:

a. an acquiring section for acquiring original image information which represents an original image to be recorded on a recording medium,

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b. an image processing section for generating the image information which represents an image to be recorded on the recording medium and for outputting said the image information to the recording section by image processing said original image information,

c. a monitoring section monitors whether at least one of failure of the acquiring section, inferior obtaining of original information by the acquiring section, and failure of image processing by the image processing section has occurred,

Itoyama et al disclose an apparatus having:

a. an acquiring section for acquiring original image information which represents an original image to be recorded on a recording medium, Figure 1, element 1 (scanner), Figure 1, element 5,

b. an image processing section for generating the image information which represents an image to be recorded on the recording medium and for outputting said the image information to the recording section by image processing said original image information, Figure 1, element 12,

c. a monitoring section monitors whether at least one of failure of the acquiring section, inferior obtaining of original information by the acquiring section, and failure of image processing by the image processing section has occurred, and the monitoring section monitors, based on a result of the reading performed by the reading section, whether said phenomenon has occurred, Figure 9, steps S1- S12, Figure 17, steps S20 – S35,

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the image information acquiring, monitoring, and processing sections of Itoyama et al. in the image recording apparatus of Suzuki et al. in order to quickly determine what section (acquiring, monitoring, storage) has a defect.

Allowable Subject Matter

5. The allowance of claims 9 – 11 has been vacated due to the new reference, Suzuki et al.
6. Claims 1 – 5, 8, and 12 - 20 are allowed.
7. Claims 23, 24, 30, and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

a. A search of prior art did not cite an apparatus wherein the monitoring section monitors a decrease in a vacant storage capacity of the storage section as claimed in the limitations of claim 23.

b. A search of prior art did not cite an apparatus wherein the monitoring section monitors whether at least one of failure of the acquiring section, inferior obtaining of original information by the acquiring section, and failure of image processing by the image processing section has occurred as claimed in the limitations of claim 24.

c. A search of prior art did not cite an apparatus wherein the adopting section controls the supply mechanism to supply a recording solution from the subtank to the main tank as claimed in the limitations of claim 30.

d. A search of prior art did not cite an apparatus wherein when it is determined that a decrease in a vacant storage capacity of the storage section has occurred, the adopting section controls the input section to temporarily stop input of the image information as claimed in the limitations of claim 32.

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Response to Arguments

8. Applicant's arguments with respect to claims 9 - 11 have been considered but are moot in view of the new ground(s) of rejection. The Suzuki et al. ('361 patent) discloses all of the limitations in amended claim 9. This reference was not available to the examiner at the time of the previous action.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Dudding whose telephone number is (571) 272-2144. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier, AU 2853, can be reached at (571) 272 - 2149. The fax phone number for this Group is are (703) 872-9306.

The examiner's fax phone is (571) 273 - 2144.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 308-0956.

Michael S. Beck
Primary Examiner

Alfred Dudding

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